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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,784	10/19/2001	Keld Lange	Q66664	6691

7590 10/22/2004

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EXAMINER

FRAZIER, OWEN J

ART UNIT PAPER NUMBER

2687

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,784

Applicant(s)

LANGE ET AL.

Examiner

Owen J Frazier

Art Unit

2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/19/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It does not identify the citizenship of each inventor.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 6, 7, 8, 9, 10, 11, 12, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Sriram (US Pat# 6,366,606).

Regarding claims 1 and 10, Sriram teaches a base station or a mobile station of a radio operated telecommunications system with a receiver (Col. 1 lines 31-35) for processing received information, and a digital signal processor (Col. 2 line 34), for

performing symbol rate processing and chip rate processing (Col. 4 lines 36-41 and Col. 5 lines 19-33, 51-60).

Regarding claim 6, Sriram teaches memory which can be suitable for the intermediate storage of the received information (Col. 1 lines 45-50 and Col. 2 lines 29, 49-54).

Regarding claim 7, Sriram teaches despreading of the received information (Col. 6 lines 34-35).

Regarding claim 8, Sriram teaches decoding of the received information (Col. 5 lines 51-60).

Regarding claims 9 and 17, Sriram teaches a receiver (Col. 1 lines 31-35) for a base station or a mobile station for processing received information, and a digital signal processor (Col. 2 line 34), for performing symbol rate processing and chip rate processing (Col. 4 lines 36-41 and Col. 5 lines 19-33, 51-60).

Regarding claim 11, Sriram teaches that the telecommunications system is CDMA (Col. 2 lines 18 and 60-67).

Regarding claim 12, Sriram inherently teaches a process for operating a radio-operated telecommunications system, wherein the information received by a base station or a mobile station is subjected to a symbol rate processing by means of a digital signal processor (Col. 2 line 34) wherein at least part of the chip rate processing is likewise performed (Col. 4 lines 36-41 and Col. 5 lines 19-33, 51-60).

Regarding claim 18, Sriram teaches a digital signal processor (Col. 2 line 34) for performing a symbol rate processing for a receiver of a base station or a mobile station

of a radio-operated telecommunications system, wherein the signal processor is suitable for performing at least parts of chip rate processing (Col. 4 lines 36-41 and Col. 5 lines 19-33, 51-60).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 3, 13, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sriram (US Pat# 6,366,606) in view of Warty (US Pat# 4,827,499).

Regarding claims 2 and 14, Sriram fails to teach the signal processor performing task allocation for controlling the chip rate processing and the symbol rate processing. Warty teaches a call control of a distributed processing communications switching system that has processors performing task allocation (Col. 5 lines 36-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Warty into that of Sriram for the obvious reason of being able to pick which function to operate for quicker processing because it decentralizes task functionality.

Regarding claims 3 and 13, Sriram fails to specifically teach the signal processor performing chip rate processing before symbol rate processing. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

perform chip rate processing before symbol rate processing because the information must be despread before it can be decoded.

Regarding claim 16, Sriram fails to teach the distribution of the array or group of signal processors between the chip rate processing and the symbol rate processing is performed by task allocation. The limitations of the claim are rejected as the same reason set forth in claims 2 and 14 above, where it would have been obvious to incorporate the teaching of Warty into Sriram because it decentralizes task functionality.

5. Claims 4, 5, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sriram (US Pat# 6,366,606) and Warty (US Pat# 4,827,499) as applied to claims 2 and 16 above, and further in view of Komara (US Pat# 6,161,024).

Regarding claim 4, Sriram fails to teach an array or group of digital signal processors provided. Komara teaches a redundant broadband multi-carrier base station for wireless communications with a group of digital signal processors (Fig. 1, Col. 2 lines 63-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Komara into that of Sriram for the obvious reason of having a plurality of processors to accommodate a plurality of users for faster processing and a backup structure for failure purposes.

Regarding claims 5 and 15, Sriram and Komara fail to teach chip rate processing and symbol rate processing distributed between sub-arrays or sub-groups of signal processors. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to distribute chip rate processing and symbol rate

processing between sub-groups in order have quicker processing and to reduce complexity of the processors functions.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cai (US Pat# 5,960,040), Oishi (US Pat# 6,563,859), Easton (US Pat# 5,764,687), Suzuki (US Pat# 6,600,729), Nordling (US Pat# 6,138,190), and Dajer (US Pat# 6,094,585).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Owen J Frazier whose telephone number is (703) 305-0548. The examiner can normally be reached on Monday-Friday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (703) 306-3016. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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